

### Linear Transformations Worksheet

SHAPE	Mean	St. Dev.	Min	Q1	Med	Q3	Max	IQR	Range (#)
left sk	30.2	6.95	12	26	30	36	40	10	28

SHAPE	Mean	St. Dev.	Min	Q1	Med	Q3	Max	IQR	Range (#)
left sk	30.2	6.95	12	26	30	36	40	10	28
left sk	40.2	6.95	22	36	40	46	50	10	28
left sk	60.4	13.91	24	52	60	72	80	20	56
left sk	80.4	13.91	44	72	80	92	100	20	56

4) In general: if we multiply every value by constant (a)

Mean

Med

Quartiles

Std. Dev

IQR

4) In general: if we add constant (b) to every value

Mean

Med

Quartiles

Std. Dev

IQR

#### **Example from worksheet: (#6)**

	<b>-12</b>	<b>x3</b>	<b>+10 then /2</b>
Mean = 20	8	60	15
Med = 25	13	75	17.5
Q1 = 18	6	54	14
Q3 = 32	20	96	21
S = 4	4	12	2
IQR = 14	14	42	7